groups. Planners may experience the pressure of deadlines and tight work schedules, as well as political pressure generated by interest groups affected by land use proposals.

Employment
Urban and regional planners held about 35,000 jobs in 1998, and about 6 out of 10 were employed by local governments. An increasing proportion of planners is employed in the private sector for companies involved with research and testing or management and public relations. Others are employed in State agencies dealing with housing, transportation, or environmental protection, and a small number work for the Federal Government.

Training, Other Qualifications, and Advancement
Employers prefer workers who have advanced training. Most entry-level jobs in Federal, State, and local government agencies require a master's degree in urban or regional planning, urban design, geography, or a similar course of study. For some positions, a bachelor's degree and related work experience is sufficient. A bachelor's degree from an accredited planning program, coupled with a master's degree in architecture, landscape architecture, or civil engineering, is good preparation for entry-level planning jobs in areas such as urban design, transportation, or the environment. A master's degree from an accredited planning program provides the best training for a number of planning fields. Although graduates from one of the limited number of accredited bachelor's degree programs qualify for many entry-level positions, their advancement opportunities are often limited unless they acquire an advanced degree.

Courses in related disciplines such as architecture, law, earth sciences, demography, economics, finance, health administration, geographic information systems, and management are highly recommended. In addition, familiarity with computer models and statistical techniques is necessary.

In 1999, about 80 colleges and universities offered an accredited master's degree program, and about 10 offered an accredited bachelor's degree program in urban or regional planning. These programs are accredited by the Planning Accreditation Board, which consists of representatives of the American Institute of Certified Planners, the American Planning Association, and the Association of Collegiate Schools of Planning. Most graduate programs in planning require a minimum of 2 years.

Specializations most commonly offered by planning schools are environmental planning, land use and comprehensive planning, economic development, housing, historic preservation, and social planning. Other popular offerings include community development, transportation, and urban design. Graduate students spend considerable time in studios, workshops, and laboratory courses learning to analyze and solve planning problems. They are often required to work in a planning office part time or during the summer. Local government planning offices frequently offer students internships, providing experience that proves invaluable in obtaining a full-time planning position after graduation.

The American Institute of Certified Planners (AICP), a professional institute within the American Planning Association (APA), grants certification to individuals who have the appropriate combination of education and professional experience and pass an examination. Certification may be helpful for promotion.

Planners must be able to think in terms of spatial relationships and visualize the effects of their plans and designs. Planners should be flexible and able to reconcile different viewpoints and to make constructive policy recommendations. The ability to communicate effectively, both orally and in writing, is necessary for anyone interested in this field.

After a few years of experience, planners may advance to assignments requiring a high degree of independent judgment, such as designing the physical layout of a large development or recommending policy and budget options. Some public sector planners are promoted to community planning director and spend a great deal of time meeting with officials, speaking to civic groups, and supervising a staff. Further advancement occurs through a transfer to a larger jurisdiction with more complex problems and greater responsibilities, or into related occupations, such as director of community or economic development.

Job Outlook
Employment of urban and regional planners is expected to grow about as fast as the average for all occupations through 2008, due to the need for State and local governments to provide public services such as regulation of commercial development, the environment, transportation, housing, and land use and development. Non-governmental initiatives dealing with historic preservation and redevelopment will provide additional openings. Some job openings will also arise from the need to replace experienced planners who transfer to other occupations, retire, or leave the labor force for other reasons.

Most planners work for local governments with limited resources and many demands for services. When communities need to cut expenditures, planning services may be cut before more basic services such as police or education. As a result, the number of openings in private industry for consulting positions is expected to grow more rapidly than the number of openings in government.

Most new jobs for urban and regional planners will arise in more affluent, rapidly expanding communities. Local governments need planners to address an array of problems associated with population growth. For example, new housing developments require roads, sewer systems, fire stations, schools, libraries, and recreation facilities that must be planned while considering budgetary constraints. Small town chambers of commerce, economic development authorities and tourism bureaus may hire planners, preferring candidates with some background in marketing and public relations.

Earnings
Median annual earnings of urban and regional planners were $42,860 in 1998. The middle 50 percent earned between $32,920 and $56,150 a year. The lowest 10 percent earned less than $26,020 and the highest 10 percent earned more than $80,090 a year. Median annual earnings for urban and regional planners in 1997 were $40,700 in local government and $38,900 in State government.

Related Occupations
Urban and regional planners develop plans for the growth of urban, suburban, and rural communities. Others whose work is similar include architects, landscape architects, city managers, civil engineers, environmental engineers, directors of community or economic development, and geographers.

Sources of Additional Information
Information on careers, salaries, and certification in urban and regional planning is available from:

☛ American Planning Association, Education Division, 122 South Michigan Ave., Suite 1600, Chicago, IL 60603.
Internet: **http://www.planning.org**

Social Scientists, Other

(O*NET 24199A, 27199A, 27199B, 27199C, 27199D, 27199E, 27199F, 27199G, and 27199H)

Significant Points

- Educational attainment of social scientists is among the highest of all occupations.
- Job opportunities are expected to be best in social service agencies, research and testing services, and management consulting firms.

Nature of the Work

The major social science occupations covered in this statement include anthropologists, geographers, historians, political scientists, and sociologists. (Economists, psychologists, and urban and regional planners are covered in the preceding *Handbook* statements.)

Social scientists study all aspects of society—from past events and achievements to human behavior and relationships between groups. Their research provides insights that help us understand different ways in which individuals and groups make decisions, exercise power, and respond to change. Through their studies and analyses, social scientists suggest solutions to social, business, personal, governmental, and environmental problems.

Research is a major activity for many social scientists. They use various methods to assemble facts and construct theories. Applied research usually is designed to produce information that will enable people to make better decisions or manage their affairs more effectively. Interviews and surveys are widely used to collect facts, opinions, or other information. Information collection takes many forms including living and working among the population being studied; field investigations, the analysis of historical records and documents; experiments with human or animal subjects in a laboratory; administration of standardized tests and questionnaires; and preparation and interpretation of maps and computer graphics. The work of the major specialties in social science—other than psychologists, economists, and urban and regional planners—varies greatly. Specialists in one field, however, often find that their research overlaps work being conducted in another discipline.

Anthropologists study the origin and the physical, social, and cultural development and behavior of humans. They may study the way of life, archaeological remains, language, or physical characteristics of people in various parts of the world. Some compare the customs, values, and social patterns of different cultures. Anthropologists usually concentrate in sociocultural anthropology, archaeology, linguistics, or biological-physical anthropology. Sociocultural anthropologists study customs, cultures, and social lives of groups in settings that vary from nonindustrialized societies to modern urban centers. Archaeologists recover and examine material evidence, such as ruins, tools, and pottery remaining from past human cultures in order to determine the history, customs, and living habits of earlier civilizations. Linguistic anthropologists study the role of language in various cultures. Biological-physical anthropologists study the evolution of the human body, look for the earliest evidences of human life, and analyze how culture and biology influence one another. Most anthropologists specialize in one particular region of the world.

Geographers analyze distributions of physical and cultural phenomena on local, regional, continental, and global scales. Economic geographers study the distribution of resources and economic activities. Political geographers are concerned with the relationship of geography to political phenomena, whereas cultural geographers study the geography of cultural phenomena. Physical geographers study variations in climate, vegetation, soil, and landforms, and their implications for human activity. Urban and transportation geographers study cities and metropolitan areas, while regional geographers study the physical, economic, political, and cultural characteristics of regions, ranging in size from a congressional district to entire continents. Medical geographers study health care delivery systems, epidemiology (the study of the causes and control of epidemics), and the effect of the environment on health. (Some occupational classification systems include geographers under physical scientists rather than social scientists.)

Historians research, analyze, and interpret the past. They use many sources of information in their research, including government and institutional records, newspapers and other periodicals, photographs, interviews, films, and unpublished manuscripts such as personal diaries and letters. Historians usually specialize in a country or region; a particular time period; or a particular field, such as social, intellectual, political, or diplomatic history. Biographers collect detailed information on individuals. Genealogists trace family histories. Other historians help study and preserve archival materials, artifacts, and historic buildings and sites.

Social scientists study all aspects of human society.

Political scientists study the origin, development, and operation of political systems and public policy. They conduct research on a wide range of subjects such as relations between the United States and other countries, the institutions and political life of nations, the politics of small towns or a major metropolis, or the decisions of the U.S. Supreme Court. Studying topics such as public opinion, political decision-making, ideology, and public policy, they analyze the structure and operation of governments as well as various political entities. Depending on the topic, a political scientist might conduct a public opinion survey, analyze election results, analyze public documents, or interview public officials.

Sociologists study society and social behavior by examining the groups and social institutions people form, as well as various social, religious, political, and business organizations. They also study the behavior and interaction of groups, trace their origin and growth, and analyze the influence of group activities on individual members. They are concerned with the characteristics of social groups, organizations, and institutions; the ways individuals are affected by each other and by the groups to which they belong; and the effect of social traits such as sex, age, or race on a person's daily life. The results of sociological research aid educators, lawmakers, administrators, and others interested in resolving social problems and formulating public policy.

Most sociologists work in one or more specialties, such as social organization, stratification, and mobility; racial and ethnic relations; education; family; social psychology; urban, rural, political, and comparative sociology; sex roles and relations; demography; gerontology; criminology; or sociological practice.

Working Conditions

Most social scientists have regular hours. Generally working behind a desk, either alone or in collaboration with other social scientists, they read and write research reports. Many experience the pressures of writing and publishing articles, deadlines and tight schedules, and sometimes they must work overtime, for which they usually are not reimbursed. Social scientists often work as an integral part of a research team, where good communications skills are important.

Travel may be necessary to collect information or attend meetings. Social scientists on foreign assignment must adjust to unfamiliar cultures, climates, and languages.

Some social scientists do fieldwork. For example, anthropologists, archaeologists, and geographers often travel to remote areas, live among the people they study, learn their languages, and stay for long periods at the site of their investigations. They may work under rugged conditions, and their work may involve strenuous physical exertion.

Social scientists employed by colleges and universities usually have flexible work schedules, often dividing their time among teaching, research and writing, consulting, or administrative responsibilities.

Employment

Social scientists held about 50,000 jobs in 1998. Many worked as researchers, administrators, and counselors for a wide range of employers, including Federal, State, and local governments, educational institutions, social service agencies, research and testing services, and management consulting firms. Other employers include international organizations, associations, museums, and historical societies.

Many additional individuals with training in a social science discipline teach in colleges and universities, and in secondary and elementary schools. (For more information, see the *Handbook* statements on college and university faculty, and kindergarten, elementary, and secondary school teachers.) The proportion of social scientists that teach varies by specialty—for example, the academic world usually is a more important source of jobs for graduates in history than for graduates in the other fields of study.

Training, Other Qualifications, and Advancement

Educational attainment of social scientists is among the highest of all occupations. The Ph.D. or equivalent degree is a minimum requirement for most positions in colleges and universities and is important for advancement to many top level nonacademic research and administrative posts. Graduates with master's degrees in applied specialties usually have better professional opportunities outside of colleges and universities, although the situation varies by field. Graduates with a master's degree in a social science qualify for teaching positions in junior colleges. Bachelor's degree holders have limited opportunities and in most social science occupations do not qualify for "professional" positions. The bachelor's degree does, however, provide a suitable background for many different kinds of entry-level jobs, such as research assistant, administrative aide, or management or sales trainee. With the addition of sufficient education courses, social science graduates also can qualify for teaching positions in secondary and elementary schools.

Training in statistics and mathematics is essential for many social scientists. Mathematical and quantitative research methods are increasingly used in geography, political science, and other fields. The ability to use computers for research purposes is mandatory in most disciplines.

Depending on their jobs, social scientists may need a wide range of personal characteristics. Because they constantly seek new information about people, things, and ideas, intellectual curiosity and creativity are fundamental personal traits. The ability to think logically and methodically is important to a political scientist comparing, for example, the merits of various forms of government. Objectivity, open-mindedness, and systematic work habits are important in all kinds of social science research. Perseverance is essential for an anthropologist, who might spend years accumulating artifacts from an ancient civilization. Excellent written and oral communication skills are essential for all these professionals.

Job Outlook

Overall employment of social scientists is expected to grow about as fast as the average for all occupations through 2008. Prospects are best for those with advanced degrees, and usually are better in disciplines such as sociology and geography, which offer more opportunities in nonacademic settings.

Government agencies, social service organizations, marketing, research and consulting firms, and a wide range of businesses seek social science graduates, although often in jobs with titles unrelated to their academic discipline. Social scientists will face stiff competition for academic positions. However, the growing importance and popularity of social science subjects in secondary schools is strengthening the demand for social science teachers at that level.

Candidates seeking positions as social scientists can expect to encounter competition in many areas of social science. Some social science graduates, however, will find good employment opportunities in areas outside traditional social science, often in related jobs that require good research, communication, and quantitative skills.

Earnings

Median annual earnings of all other social scientists (excluding economists, psychologists, and urban and regional planners) were $38,990 in 1998. The middle 50 percent earned between $28,950 and $56,550 a year. The lowest 10 percent earned less than $21,530 and the highest 10 percent earned more than $80,640 a year. Median annual earnings of all other social scientists in 1997 were $53,700 in the Federal Government and $37,300 in State government, except education and hospitals.

In the Federal Government, social scientists with a bachelor's degree and no experience could start at $20,600 or $25,500 a year in 1999, depending on their college records. Those with a master's degree could start at $31,200, and those with a Ph.D. degree could begin at $37,700, while some individuals with experience and an advanced degree could start at $45,200. Beginning salaries were slightly higher in selected areas of the country where the prevailing local pay level was higher.

Related Occupations

A number of occupations requiring training and personal qualities similar to those of social scientists are covered elsewhere in the *Handbook*. These include lawyers, statisticians, mathematicians, computer programmers, computer scientists, computer engineers, computer systems analysts, reporters and correspondents, social workers, college and university faculty, and counselors.

Sources of Additional Information

Detailed information about economists and marketing research analysts, psychologists, and urban and regional planners is presented elsewhere in the *Handbook*.

For information about careers in anthropology, contact:

☛ The American Anthropological Association, 4350 N. Fairfax Dr., Suite 640, Arlington, VA 22203. Internet: **http://www.aaanet.org**

For information about careers in archaeology, contact:

☛ Society for American Archaeology, 900 2nd St. NE., Suite 12, Washington, DC 20002. Internet: **http://www.saa.org**

☛ Archaeological Institute of America, 656 Beacon St., Boston, MA 02215. Internet: **http://www.archaeological.org**

For information about careers in geography, contact:

☛ Association of American Geographers, 1710 16th St. NW, Washington, DC 20009. Internet: **http://www.aag.org**

Information on careers for historians is available from:

☛ American Historical Association, 400 A St. SE, Washington, DC 20003. Internet: **http://www.theaha.org**

☛ Organization of American Historians, 112 North Bryan St., Bloomington, IN 47408. Internet: **http://www.oah.org**

☛ American Association for State and Local History, 1717 Church St., Nashville, TN 37203-2991. Internet: **http://www.aaslh.org**

For information about careers in political science, contact:

☛ National Association of Schools of Public Affairs and Administration, 1120 G St. NW, Suite 730, Washington, DC 20005. Internet: **http://www.naspaa.org**

Information about careers in sociology is available from:
☛ American Sociological Association, 1307 New York Ave. NW., Suite 700, Washington, DC 20005. Internet: **http://www.asanet.org**

For information about careers in demography, contact:
☛ Population Association of America, 721 Ellsworth Dr., Suite 303, Silver Spring, MD 20910. Internet: **http://www.popassoc.org**

Social and Recreation Workers

Human Service Workers and Assistants

(O*NET 27308)

Significant Points

- Human service worker and assistant occupations are projected to be among the fastest growing.
- Job opportunities should be excellent, particularly for applicants with appropriate postsecondary education, but pay is low.

Nature of the Work

Human service workers and assistants is a generic term for people with various job titles, including social service assistant, case management aide, social work assistant, community support worker, alcohol or drug abuse counselor, mental health aide, community outreach worker, life skill counselor, and gerontology aide. They usually work under the direction of professionals from a variety of fields, such as nursing, psychiatry, psychology, rehabilitative or physical therapy, or social work. The amount of responsibility and supervision they are given varies a great deal. Some have little direct supervision; others work under close direction.

Human service workers and assistants provide direct and indirect client services. They assess clients' needs, establish their eligibility for benefits and services, and help clients obtain them. They examine financial documents such as rent receipts and tax returns to determine whether the client is eligible for food stamps, Medicaid, welfare, and other human service programs. They also arrange for transportation and escorts, if necessary, and provide emotional support. Human service workers and assistants monitor and keep case records on clients and report progress to supervisors and case managers. Human service workers and assistants also may transport or accompany clients to group meal sites, adult daycare centers, or doctors' offices. They may telephone or visit clients' homes to make sure services are being received, or to help resolve disagreements, such as those between tenants and landlords. They also may help clients complete insurance or medical forms, as well as applications for financial assistance. Additionally, social and human service workers and assistants may assist others with daily living needs.

Human service workers and assistants play a variety of roles in a community. They may organize and lead group activities, assist clients in need of counseling or crisis intervention, or administer a food bank or emergency fuel program. In halfway houses, group homes, and government-supported housing programs, they assist adults who need supervision with personal hygiene and daily living skills. They review clients' records, ensure that they take correct doses of medication, talk with family members, and confer with medical personnel and other care givers to gain better insight into clients' backgrounds and needs. Human service workers and assistants also provide emotional support and help clients become involved in their own well being, in community recreation programs, and in other activities.

In psychiatric hospitals, rehabilitation programs, and outpatient clinics, human service workers and assistants work with professional care providers, such as psychiatrists, psychologists, and social workers to help clients master everyday living skills, to teach them how to communicate more effectively, and to get along better with others. They support the client's participation in a treatment plan, such as individual or group counseling or occupational therapy.

Working Conditions

Working conditions of human service workers and assistants vary. Some work in offices, clinics, and hospitals, while others work in group homes, shelters, sheltered workshops, and day programs. Many spend their time in the field visiting clients. Most work a 40-hour week, although some work in the evening and on weekends.

The work, while satisfying, can be emotionally draining. Understaffing and relatively low pay may add to the pressure. Turnover is reported to be high, especially among workers without academic preparation for this field.

Employment

Human service workers and assistants held about 268,000 jobs in 1998. Almost half worked in private social or human services agencies, offering a variety of services, including adult daycare, group meals, crisis intervention, counseling, and job training. Many human service workers and assistants supervised residents of group homes and halfway houses. About one-third were employed by State and local governments, primarily in public welfare agencies and facilities for mentally disabled and developmentally challenged individuals. Human service workers and assistants also held jobs in clinics, detoxification units, community mental health centers, psychiatric hospitals, day treatment programs, and sheltered workshops.

Human service workers and assistants assess clients' needs and help them obtain appropriate benefits and services.